EXHIBIT 6
DATE 2-14-07
HB HJ 15

House Natural Resources Hearing on
House Joint Resolution No. 15
February 14, 2007
Presented by Michael McLane, Private Citizen
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Chairman McNutt and committee members, for the record I am Michael McLane, and am speaking as a private citzens and resident of Montana residing in Helena, Montana. Although I work with several watershed groups and water management committes in Montana and have worked for Montana DNRC and Montana FWP I do not today speak for or represet any of those organizations.

I am here to today to speak in favor of House Joint Resolution No. 15 proposing the legislative investigation of Water Banking as a future water management and water allocation, or more correctly re-allocation tool. I recognize the work that the Legislative Environmental Quality Council did in 2003 and 2004 on water banking. That work is a valuable as a starting point for the additional and more detailed work requested in House Joint Resolution 15.

A water bank is simply a tool. First and foremost, a water bank is a "facilitator" of market exchanges. Most water banks, created in other western states, are in response to over-appropriated streams and act as a tool to facilitate both water conservation and water transfers. Such banks may provide additional services and operational controls that reflect public policy. This bill asks for a legislative authorized opportunity for this body to examine, evaluate this as a potential water management and allocation tool. I have attached and am providing a research paper on Water Banking that elaborates on some of the experiences in other states.

I have heard testimony, such as that provided to this committee last Friday that or spoke to the increasing demand and emphasis being placed on the transfer of existing water rights, to provide

water for future uses and to mitigate the impact of new use. Montana's legislature currently has are no less than four bills where a water bank could, if Montana so choose, play a significant role. For example,

- Last Friday you heard testimony on two bills, HB 138 and HB 373, both include a concept described as "augmentation" That testimony introduced several possible and expected source of augmentation water, however, I ask you, could a state or basin specific water bank be a source and maybe a manager for that augmentation water?
- On January 29th, this committee heard testimony on House Bill 262, Water Rights in Growth Counties. One of the items that legislative proposal would require is an acquisition or water or water rights prior to plat approval. Might a water bank be a valuable entity to facility such acquisitions or re-allocations?
- Senate Bill 376 that was heard by the Senate Natural Resources and Energy Committee on Feb 2, amends the existing statutes related to "Water Marking". Might a water bank, rather than DNRC be a more efficient entity for Montana's, as of yet, untested water marketing program?
- House Bill 442, is an appropriations bill heard in committee on Feb 9th. This bill requests funding for a "costs reallocation analysis". That analysis is a necessary first step in the federal process to developing a contract for Hungry Horse water. This bill builds upon work done by this body last legislative session on what was then HJ3 directing DNRC to examine water availability and leasing potential from the Federally owned and operated Hungry Horse reservoir. Again, if Montana is able to and chooses to develop a contract for future water supply from this reservoir, might a Water Bank be a tool to re-allocate those water leases or contracts?

In the 1980, the legislature and water community develop many tools related to water transfers, temporary leasing, leasing for target supplies, such as instream flow or drought response and even a bill for state run water marketing from existing storage. These tools are used in evaluating, authorizing water transfers and mitigating third party adverse affects. Some are little used, in part due to constraints and limitations in information or process.

A Montana Water Bank acting simply a registry that links willing sellers with interested lessees or buyers may be all that Montana desires. However, there may be more opportunities to assist Montana meet its future water demands.

Montana also needs to examine some the implementation challenges that might occur in the adoption of a water bank into our water allocation processes. For example, if a Water Bank, acquires or has "deposited" a water right – when and how is a change of use application submitted to DN RC and evaluated? That is a least one question that should arise in this process.

One third of Montana's hydrologic basin, that encompass about one third of the state's land mass, and include portions of the states two major rivers is over appropriated and closed to new surface and some ground water appropriations. In those areas a least, new methods and tools are needed to address future water demand. Perhaps a water bank can be a tool in meeting those future challenges.

Again, I recommend this committee look at this resolution and support it through the legislative process.

Water Banking
A Water Marketing Tool for Water Allocation

"A water bank is defined as a water conservation tool that enables voluntary, temporary transfers of water entitlements between willing water right holders and users based on how much water a user needs and when it is needed without a permanent change in water rights".[1]

A survey conducted by the state of Washington's Department of Ecology (WDOE), reported that 9 of 18 surveyed western states have state-operated water banking activities in some stage of development. Apparently, the details of water banking vary greatly from state to state. WDOE reported that most states operate their bank at a regional level, which makes sense both hydrologically and culturally. "Regional banks require fewer resources and are likely to provide an opportunity to identify methods to meet local market requirements."[2]

A brief examination of the water banking organizations, state banking provisions, and pilot programs established across the west indicate that banking mechanisms are being asked to do far more than "exchange" water entitlements. Additional services and operational controls are frequently added to reflect public policy.

A Market Facilitator

A water bank is first and foremost a facilitator of market exchanges. In 1991, and apparently in several subsequent years, the State of California developed a temporary water bank. California created a single governmental market that would buy water from all sources and sell water to all buyers. It also identified prices for purchase and sale. This structure greatly reduced transaction costs associated with water marketing.[3] With the state's water resources agency acting as the bank, contracts were developed in a single season with 351 sellers of water and 13 buyers. These contracts represented transactions for 830,000 acre-feet of water. Without the bank, the potential buyers, primarily municipalities and water district, would have had to seek out and develop contracts with many and potentially all of the 351 sellers. The state had unique responsibilities and knowledge and provided a critical link in the state's many water delivery systems. The state, therefore, was also able to direct and restrict most potential water transaction to the bank itself, facilitate the delivery of water, and use its powers to require protection of environmental conditions.[4]

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[1] "Water Banking in the Walker River Basin" Barriers and Opportunities", Fact sheet FS – O1-21, Loretta Singletary, Extension Educator, Lyon County, Cooperative Extension, University of Nevada

[2] "Water Banking Program in Other States", Peggy Clifford, Washington Department of Ecology, April 21, 2003.

[3] "The 1991 State of California Water Bank" Water Marking Takes a Quantum Leap, John B. Loomis, Dept of Agricultural Economic University of Davis, Rivers, Studies in the Science, Environmental Policy and Law of Instream Flow, Volume 2 number 2, April 1992.

[4] Ibid.

Other Water Bank Services

The Western States' Water Council, in a report on state tools to provide water for endangered species, identified the following potential benefits of a market-based water bank:

> A water banking...system, could potentially provide a centralized and specialized source of information about water availability and water needs. A state of individuals having technical understanding of the hydrologic, economic, and legal impacts and economic externalities that accompany changes in water use, could be effective in negotiating cost-effective and resource efficient match-ups of buyers and sellers of water. The bank... may provide any or all of the following:
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> a) A listing or registry of water rights for sale or lease, the location of those rights, the asking price, and the physical characteristics of the entitlement available to the public market.
> b) A registry of potential purchasers of water rights shares or lease-holds, the use intended, the quantity, quality, and regimen requirements, and the location of proposed use.
> c) Information about local water institutions, their supply availabilities, their service areas, storage and distribution facilities, and potentials for participation or involvement in accomplishing specific transfer options.
> d) Analysis of the "conditioning" implication and constraints in transferring a particular right from present use to new location and use situations.
> e) Clarification and possibly certification of legal status and title of water rights of interest to prospective buyers.
>
> Though few states have used these techniques to change the use of large amounts of water, it is growing more popular in the West as demands increase.[5]

In many states the water bank serves primarily as the single market through which water sources buy and sell the rights to use water. Water banks often reduce transactions costs by developing a center / brokerage house that brings interested buyers and sellers together.[6] In many instances, the bank becomes a repository for available water or water rights.

Most water banks have been created in over-appropriated areas as a tool to facilitate water conservation and water transfers. The Arizona Water Banking Authority appears to be the only bank created to encourage development and protection of unused water. The 1928 Colorado River Compact allocated water to lower basin states along the Colorado River. Arizona was allocated 2.8 million acre feet plus 46% of any annual surplus. Arizona was not utilizing this allocation. With creation of the banking authorities in 1996, Arizona developed a complex mechanism to divert water and store it

[5] "State Tools To provide Water For Endangered Species", a report Compiled by Western State Water Council, Chad Shattuck, June 2003.

[6] "Water Banking: What is it and How Does It Work?", Loretta Singletry, Western Resource Issues Education Series, No. 6, Fact Sheet 98-90, University of Nevada, Reno. September 1992

during times of surplus and acquire credits during times of shortage. Each year the water bank pays the delivery and storage cost to bring Arizona's share of unused Colorado River Water into Central and Southern Arizona through the Central Arizona project. The water is stored underground in existing aquifers (direct storage) or is used by irrigation districts in lieu of pumping ground water (indirect storage). Each acre foot stored the water bank accrues a credit that can be redeemed in the future when Arizona communities need this back-up supply. The Arizona water bank provides drought protection, enhanced water management, settlement of Indian water right claims, statewide water credits for Colorado water,[7] and water for interstate water transfers.[8] In 2002, using the water bank, Arizona diverted its entire allocation of Colorado River Water for the first time. Further, the water bank recharged more than 345,00 acre feet of Central Arizona Project waters.[9] A similar tool might not be of value to Montana in acquiring and using water from reservoirs such as Fort Peck, Hungry Horse, Yellowtail, and Koocanusa.

Water Marketing

While banking is currently being discussed and tried experimentally across the west, informal water markets continue to be used primarily to transfer of water from agricultural to urban uses. Recently, water markets have also been used to move water from consumptive to non-consumptive or in-stream environmental. These water market-facilitated movements have generated concerns related to water rights and the associated property rights and social, environmental and economic concerns. Many of these concerns are not traditionally reviewed in a water exchange. Examples of these concerns include:

- Negative impact on local economies due to the transfer of water out of the area;
- Potential decreases in food and animal feed supply (thus an increase in food and animal feed prices, at least locally);
- Negative impacts on wildlife habitats hosted by crops or other irrigated plant life;
- Loss of aesthetic associated with fallowed and now not cultivated lands
- Weeds and other undesirable plant species introduction, also as the result of water retirements and no cultivation.
- Decline of property values
- Decline of local tax revenues.

Interestingly very similar community impacts have been attributed to the USDA's "Conservation Reserve Program" where farmers are paid not to cultivate crops.

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[7] Critics of the recharge and banking process are arguing that the current process maybe failing in its attempts to bank ground water for future supply. Current statutory mechanisms allow credits in hydrologically unrelated basins and aquifers. This system may actually be promoting ground water drafting and mining while developing credits that cannot be met. "Recharge – Where's the Wet Water", Steve Weatherspoon, Guest View, Arizona Water Resource newsletter, September/October 2000, volume 9, Number 2, Arizona Water Center.

[8] Arizona Water Banking Authority – Annual Report, 1997.

[9] Arizona Water Banking Authority – Annual Report, 2002.

To the extent that it facilitates similar transactions moving water from agricultural to urban uses and from consumptive to instream uses, water banking may generate similar concerns.

Third Party Effects

Third party effect is the legal team often used to identify the injury or undesirable impact to other parties or the hydrologic system when a water right or water use modification is implemented. In economic term these injuries are considered "negative externalities". Some argue that the third party or negative externalities can be addressed in markets by identifying and adding the externality cost to the cost of the commodity being traded.[10] Traditionally in water law and water transactions the courts have decided the outcome and resolution of many of the third party effects related strictly to water use. Review of the current water banking and water marketing options developed by individual states indicate that public policy, not economics or the market, provide the protections from or mitigation for the third party effects.

Protection from and Mitigation of Impacts

Many states have incorporated regulatory processes governing water exchanges and functions of the water bank or water trust. For example, the State of Washington's Trust Water Rights Program authorities include the concepts of a) conversion of water to in-stream flow, b) salvage and c) marketing as functions of the Trust. Considerable emphasis is placed upon water conservation and enhancing supply by reducing demand and consumption. The Washington statute and rules specifically define "net water savings" and dedicate considerable effort in a process by which salvaged water is separated from return flows and expanded water use. Statutorily, the exercise of an acquired Trust right may not impair existing rights or the public interest. Provisions are also made for public notice prior receipt of a private water right by the Trust. Many states include this public notice as a safe guard. In Idaho, an application process is required either when water is moved into or rented from the water supply bank. Texas also uses an application process for deposits.[11]

The Idaho Water Resources Board when examining a water right for banking must evaluate a number of items including whether:

- Banking the right would cause injury to other water rights,
- The proposal would constitute and enlargement of the water right;
- The proposed use is a beneficial use;
- There is sufficient water; and
- The propose uses would be in the local public interest.

Sale or rental of water through the Idaho water banking program is also restricted to the use within Idaho. Idaho also has over riding provisions governing sale of water rights[12] and changes to existing water rights.[13] Idaho also has an appeals process whereby an

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[10] Water Banking" A solution to Water Scarcity", Fact Sheet 98-10, Western Resource Issues Education Series No. 7, Loretta Singletary, Extension Educator, University of Nevada Reno, September 11992.
[11] 359.5 TAR, 2003
[12] 42-2601 – 2608 IC
[13] 42-108 –108A IC

existing water users that is being impacted by a lease to or from the water bank may petition the Idaho Water Resource director seeking revocation of modification the lease.[14]

In the case of the Texas water bank, water deposits may not be made if the associated water right, or portion thereof, is not quantifiable, or when a petition or other formal action has been filed for cancellation or forfeiture of the water right before its deposit. A primary responsibility of the Texas water bank is the posting of water buyers and sellers. Within their banking system, Texas actually has two categories of water listed for market, those that have been affirmed by the Water Bank and those in which the bank only facilitates the meeting of the parties. In the later case the banking transactions occur on a "buyer beware" basis.

Purchase/lease of Private Rights in Montana

Montana does have a water market in which water rights and water contracts are exchanged. With the passage of the Montana Water Use Act, we have developed administrative review processes intended to protect existing rights and mitigate third party effects that may result from certain modifications of water rights. Specific statutory recognition and review of water right exchanges are found in Title 85 of the Montana code and listed under the following statutory titles:

- Temporary Changes in Appropriation Rights;[15]
- Change in Appropriation Rights;[16] and
- Short-term Lease of Appropriation Right (This is a provision providing for short duration water supplies for road construction.). [17]

Statutes also contain three water lease programs used to augment or provide in-stream flow:

- $ Temporary Change Authorization for Instream Flow;[18]
- $ Water Leasing Study;[19] and
- $ Upper Clark Fork River Basin In-stream Flow Pilot Program"[20] (Also a previously mentioned a CFLP might rely upon purchased water to augment its water supply available to markets.)

These statutory provisions allow for the voluntary exchange of on a temporary or a permanent bases. The exchanges occur on a willing buyer-willing seller basis. State involvement is typically interjected only when the water right itself is "changed", i.e. when the water right place of diversion, place of use, purpose of use, or place of storage is modified from the existing, historic operation. Statutory provisions and administrative processes also address abandonment, salvage, diversion requirements, system design and operation, and third party affects.

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[14] 42-1766 IC
[15] 85-2-407 MCA (2003)
[16] 85-2-406 MCA (2003)
[17] 85-2 410 MCA (2003)
[18] 85-2-408 MCA (2003)
[19] 85-2-431 MCA (2003)
[20] 85-2-439 MCA (2003)

Montana does not have specific statutory water banking provisions. Most transactions apparently occur between private parties without brokers or representation. However, the two in-stream flow private leasing programs have stimulated the involvement of non-profit organizations who act as brokers. The newly formed Montana Water Trust and Trout Unlimited are functioning as lease holders for the conversion or leasing of existing private water rights to in-stream flow. They have joined the Montana Department of Fish, Wildlife and Parks as the lessor of in-stream flows.

Summary

The definition at the beginning of this paper defined a water bank is as a water conservation tool that enables voluntary, temporary transfers of water entitlements between willing water right holders and users based on how much water a user needs and when it is needed without a permanent change in water." Several aspects of a water bank are currently provided for or are occurring in Montana. Existing statutes now provide methods to review and approve temporary and permanent transfers of water rights. The Department of Natural Resources and Conservation is authorized to protect the existing water right holder, mitigate third party effects, and implement state water development policy. The state plays a more limited role in sponsoring water conservation, water efficiency and water salvage. Water salvage is addressed within water rights. Water conservation and water use efficiency actions are directed to the state's water development loan and grant programs. Other common water bank functions such as facilitating water transactions, acting as a listing agent or broker are not currently provided for as a governmental function or as a recognized or regulated private sector service.